

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph that begins on application page 2, line 27 with the following replacement paragraph:

DE 4340046 A1 discloses a superconducting cable, in which 3 phases are located coaxially in relation to each other and are surrounded by a common return circuit.

Reduced consumption of material is thus rendered possible, since 3 phase conductors have a common screen.

The diameter of the individual phase conductors may be increased with the purpose of reducing the inductance without an increase of the volume being required which would be the case if 3 individual cables were used.

~~However~~~~How-ver~~, the drawback is that a sufficiently reduced inductance will not be obtained, since the relationship between the reactance and the diameter is logarithmic.

Please replace the paragraph that begins on application page 4, line 9 with the following replacement paragraph:

For further minimization of the manufacturing costs, it is preferred,~~as specified in claim 2,~~ that the individual phases only contain superconducting cable wire and an insulation system.

Please replace the paragraph that begins on application page 4, line 13 with the following replacement paragraph:

For further simplification of the manufacturing process, the groups may, ~~as specified in claim 3,~~ be arranged in n coaxial groups, either with several different phase conductors in each coaxial layer or with each individual phase conductor in a separate coaxial layer. In this way, a more simple refrigeration system with a limited number of flow paths for refrigerants could be provided.

Please replace the paragraph that begins on application page 4, line 19 with the following replacement paragraph:

By arranging the groups in N flat phases ~~as specified in claim 4,~~ the magnetic field generated by current in the phases will be relatively long, so that the magnetic induction in the cable is reduced.

In this arrangement, preferably, one or more electrically insulating foil systems may be used as electrical insulation, said foil system(s) consisting of one or more layers of insulating and optionally electrically conducting materials. Use of electrically conducting layers of foil or surface coatings implies that this coating may optionally be removed

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from selected parts of the foil or it may be selected not to
apply this coating on selected parts of the foil.